# WHITLEY COUNTY

# (Whitley County Water Service Area Map)

- Estimated 1999 population of 34,900--60% on public water
- Estimated 2020 population of 37,500--87% on public water
- 325 miles of water lines, with plans for 560 additional miles
- Estimated funding needs for public water 2000-2005--none
- Estimated funding needs for public water 2006-2020--\$60,100,000

Whitley County had an estimated population of 34,898 (14,154 households) in 1999 with a projected population of 37,508 (16,392 households) in 2020. Public water is provided to about 60 percent of the county's residents. In areas of the county not served by public water, about 93 percent of the households rely on private domestic wells and 7 percent of the households rely on other sources. About 4,370 customers will be added to public water service through new line extensions in 2000-2020.

# ESTIMATED COSTS - PROPOSED PROJECTS, 2006-2020

COUNTY/System		New		Rehab	Source	Treatment	Tanks/	Total
		Customers					Pumps	
	Miles	Number	Cost in \$1000	in \$1000				
Whitley								,
Cumberland Falls Hwy W/D	209	1,435	11,000			10,000	8,000	29,000
Pineville Utility	21	175	1,000				1,800	2,800
Corbin Utilities Comm.	51	545	2,500				1,800	4,300
Whitley Co. W/D	281	2,214	14,000				10,000	24,000
Total	562	4,369	28,500			10,000	21,600	60,100

#### PUBLIC WATER SYSTEMS

There are 10 public and semi-public water systems in Whitley County: 8 community--2 municipal, City Utilities Commission of Corbin and Williamsburg Municipal; 6 water districts, Cumberland Falls Highway Water District, Whitley County Water District, Whitley County Water Dist/Rockhold, Whitley County Water Dist/Wofford, Whitley County Water/Fairview-Ky Hill, Whitley County Water District #2-- and 2 non-community systems.

# WATER SERVICE AREAS WHITLEY COUNTY Kentucky

# Prepared By: Water Resource Development Commission

Department for Local Government 1024 Capital Center Drive, Suite 340 Frankfort, Kentucky 40601-8204 502-573-2382 -- 502-573-2939 fax http://dlgnt1.state.ky.us/wrdc/

Bob Arnold, Chairman Lawrence Wetherby, Executive Director

Final GIS & Cartographic Operations By: Kent Anness & Kim Prough

Data Collection & GIS Input By: Kentucky Area Development Districts

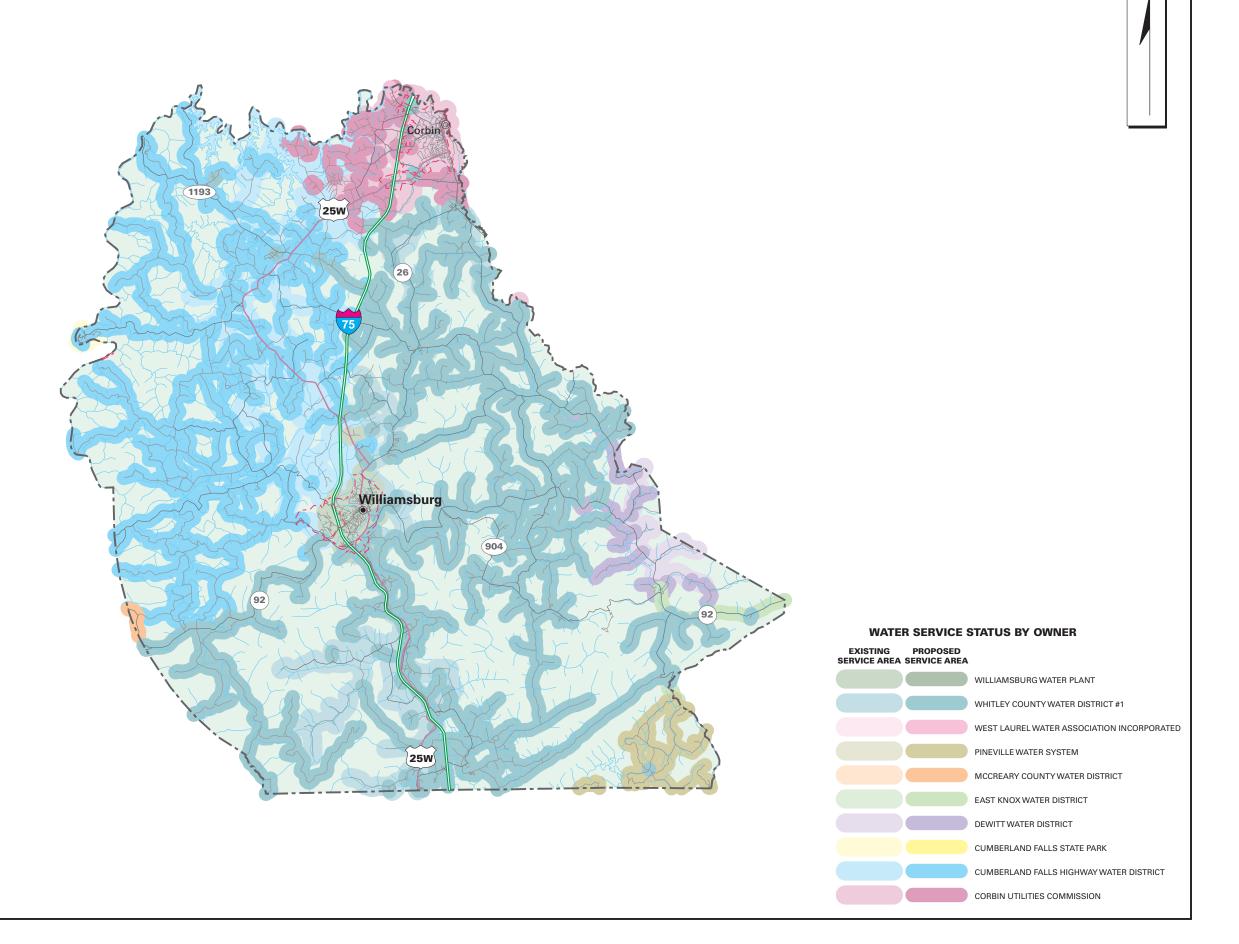








IMITATION OF LIABILITY: The Water Resource Development Commission has no reasor o believe that there are any inaccuracies or defects in information incorporated in this work off make no representations of any link, including, but not limited to, the warranties of nerchantability or fitness for a particular use, nor any such warranties to be implied, with



#### **CUMBERLAND FALLS HIGHWAY WATER DISTRICT**

PWSID:	1180093
System Type:	COMMUNITY
Owner Type:	WATER DISTRICT
Surface Source:	
Purchase Source:	WEST LAUREL WATER DISTRICT
Well Source:	
Sells Water to:	
Treatment Plant Capacity (MGD):	
Percent Daily Average Production:	
Total Tank Storage Capacity (gallons):	500,000.00
Total Service Connections:	
Number of Employees:	6.00
Treatment Operator Class:	2D
Distribution Operator Class:	
Customer Rate for 1,000 Gallons:	
O/M costs 1997:	
O/M costs per Service Connection:	
Net Revenue 1997:	
Total Water Produced 1997 (gallons):	
Water Sold 1997 (gallons):	
Unaccounted-for Water 1997 (%):	

Cumberland Falls Highway Water District buys water from City Utilities Commission of Corbin, Kentucky, Williamsburg Municipal and West Laurel Water Association.

Cumberland Falls Highway Water District sells water to the Whitley County Water District.

The system serves 1,764 residential customers, 56 commercial customers and five industrial customers. The storage capacity of this system is 500,000 gallons of water in its water storage tank.

## **CORBIN UTILITIES COMMISSION**

PWSID:	COMMUNITY
Well Source:	
Sells Water to:	WHITLEY COUNTY WATER DISTRICT #1
Treatment Plant Capacity (MGD):	
Percent Daily Average Production:	55.00
Total Tank Storage Capacity (gallons):	5,300,000.00
Total Service Connections:	5,753.00
Number of Employees:	36.00
Treatment Operator Class:	3D
Distribution Operator Class:	4A
Customer Rate for 1,000 Gallons:	
O/M costs 1997:	Not available

O/M costs per Service Connection:	Not available
Net Revenue 1997:	Not available
Total Water Produced 1997 (gallons):	Not available
Water Sold 1997 (gallons):	Not available
Unaccounted-for Water 1997 (%):	Not available

City Utilities Commission of Corbin, Kentucky, gets its water from Laurel River Lake. According to the Whitley County Water Supply Plan, this is an adequate raw water source to support future needs. This system currently serves 4,939 residential customers and 814 commercial customers. Additionally, this system sells water to the Whitley County Water District, Cumberland Falls Highway Water District and Dewitt Water District. This system has a water treatment plant that has a production capacity of 5 million gallons per day. On an average day the plant produces approximately 2.7 million gallons per day or about 54% of its total design capacity. The base charge is \$5.05 for the first 1,000 gallons of water inside the city limits and \$10.10 for the first 1,000 gallons of water for customers outside the city limits. This system currently has seven storage tanks and one clear well that have a total storage capacity of 5.3 million gallons of water.

#### **WHITLEY COUNTY WATER DISTRICT #1**

PWSID:	COMMUNITY
Surface Source:	WATER DISTRICT
Well Source: Sells Water to:	
Treatment Plant Capacity (MGD):	0.00
Percent Daily Average Production:	
Total Tank Storage Capacity (gallons):	410,000.00
Total Service Connections:	1,606.00
Number of Employees:	
Treatment Operator Class:	1D
Distribution Operator Class:	
Customer Rate for 1,000 Gallons:	6.24
O/M costs 1997:	458,380.00
O/M costs per Service Connection:	289.02
Net Revenue 1997:	55,734.00
Total Water Produced 1997 (gallons):	4,331,000.00
Water Sold 1997 (gallons):	87,487,000.00
Unaccounted-for Water 1997 (%):	30.70

The Whitley County Water District purchases water from City Utilities Commission of Corbin, Kentucky, Williamsburg Municipal, Cumberland Falls Highway Water District and

from the City of Jellico, TN. This system has a well source of 11,000 gallons of water per day. This system serves 1,523 residential customers and 83 commercial customers in Whitley County. The Whitley County Water District has three water tanks with a total storage capacity of 419,000 gallons of water.

#### **WILLIAMSBURG WATER PLANT**

PWSID:	Y L
Well Source:	
Sells Water to: WHITLEY COUNTY WATER DISTRICT #	
Treatment Plant Capacity (MGD):	0
Percent Daily Average Production: 62.00	0
Total Tank Storage Capacity (gallons):	0
Total Service Connections:	0
Number of Employees:	0
Treatment Operator Class:	)
Distribution Operator Class:	4
Customer Rate for 1,000 Gallons:	5
O/M costs 1997:Not available	
O/M costs per Service Connection:Not available	е
Net Revenue 1997:Not available	е
Total Water Produced 1997 (gallons):Not available	е
Water Sold 1997 (gallons):Not available	е
Unaccounted-for Water 1997 (%):	е

Williamsburg Municipal gets its water from he Cumberland River, and according to the Whitley County Water Supply Plan this is an adequate source of raw water for future needs. Additionally, this system sells water to Whitley County Water District and Cumberland Falls Highway Water District. This system currently serves 1,363 residential and 318 commercial customers. The water treatment plant has a design capacity of 2 million gallons of water. On an average day, the plant produces 1.44 million gallons of potable water per day or about 72% of its design capacity. This system has six storage tanks and one clear well that have total storage capacity of 2.95 million gallons of water. \$7.90 per 2,000 gallons of water is the base rate for water usage.

#### WHITLEY COUNTY WATER DIST/ROCKHOLD

Whitley County Water Dist/Rockhold is located in Whitley County. The system serves a population of 201 and has 61 service connections. The water district has treatment capacity of 25,000 gallons per day and the water source is wells.

### WHITLEY COUNTY WATER DIST/WOFFORD

Whitley County Water Dist/Wofford is located in Whitley County. The system serves a population of 686 and has 208 service connections. The water district has treatment capacity of 50,000 gallons per day and storage capacity of 175,000 gallons. The water source is wells.

#### **WHITLEY COUNTY WATER DISTRICT #2**

Whitley County Water District #2 is located in Whitley County. The system serves a population of 1,890 and has 573 service connections. The water district has treatment capacity of 720,000 gallons per day and the water source is wells.

#### WHITLEY COUNTY WATER/FAIRVIEW-KY HILL

Whitley Water/Fairview-Ky Hill is located in Whitley County. The system serves a population of 360 and has 109 service connections. The water district purchases water from Jellico Tennessee.

# OTHER SYSTEMS

D) 4 (O I D

#### **CUMBERLAND FALLS STATE PARK**

PWSID:	1182561
System Type:	
Owner Type:	STATE
Surface Source:	CUMBERLAND RIVER
Purchase Source:	
Well Source:	
Sells Water to:	
Treatment Plant Capacity (MGD):	
Percent Daily Average Production:	27.00
Total Tank Storage Capacity (gallons):	
Total Service Connections:	65.00
Number of Employees:	
Treatment Operator Class:	1D
Distribution Operator Class:	2A
Customer Rate for 1,000 Gallons:	
O/M costs 1997:	Not available

O/M costs per Service Connection:	Not available
Net Revenue 1997:	Not available
Total Water Produced 1997 (gallons):	Not available
Water Sold 1997 (gallons):	Not available
Unaccounted-for Water 1997 (%):	

#### **NEVISDALE ELEMENTARY SCHOOL**

Nevisdale Elementary School is located in Whitley County. The system serves a population of 176 and has 2 service connections. The local, non-transient, non-community system has treatment capacity of 10,000 gallons per day and the water source is wells.

#### PRIVATE DOMESTIC SYSTEMS

About 13,800 residents of Whitley County rely on private domestic water supplies: 12,800 on wells, and 1,000 on other sources.

Most wells drilled in valley bottoms are adequate for a domestic supply. Fewer than half the wells drilled on hillsides are adequate for domestic supply and wells on ridges yield smaller quantities of water. In the western quarter of the county, wells on hillsides commonly produce adequate water for domestic use and half the wells on ridges yield enough water for domestic supply. Deep wells penetrating thick sections of sandstone greater than 500 feet may yield enough water for small utilities or industrial supplies.

Most water obtained from drilled wells is extremely hard and contains noticeable amounts of iron except in the western quarter of the county where the water is soft to moderately hard. Salty water may be found less than 100 feet below the level of the principal valley bottoms.

A few springs supply sufficient quantities of water for domestic use, usually produces less than 5 gpm.